

## ABSTRACT OF THE DISCLOSURE

An evaporator and condenser unit for use in distilling a liquid, such as water, includes a rotary heat exchanger plate having a plurality of accordion-style folds, and having its two ends joined together so as to give the folded plate a generally circular form.

- 5 The adjacent panels of the folded plate define spaces between their oppositely facing surfaces, and these spaces are alternately configured as evaporating and condensing chambers. The evaporating chambers have their inner edges sealed by corresponding folds, while the condensing chambers have their outer edges sealed by corresponding folds.
- The folded plate is disposed between first and second end plates, and is mounted for rotation about its axis in a housing having a sump containing the liquid to be distilled. Liquid is supplied to the evaporating chambers and compressed vapor is supplied to the condensing chambers. Condensate is removed from the condensing chambers.
- 10